

81557  
S/062/60/000/05/07/008  
B004/B066

5.3700B

AUTHORS:

Dolgov, B. N. (Deceased), Sergeyeva, Z. I., Zubkova, N. A.,  
Matveyeva, E. M., Voronkov, M. G.

TITLE:

Organosilicon Esters of Oximes

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh  
nauk, 1960, No. 5, p. 951

TEXT: The authors report in a letter to the editor of this periodical that they had been able to prepare the trialkyl silyl ester of aldioximes and ketoximes in good yields (50-80 per cent). The synthesis was performed within 5 h at room temperature by reaction of trialkyl chlorosilanes with the corresponding oximes in the presence of pyridine according to the equation

$$R_3SiCl + HON=C(R')R'' + C_5H_5N \rightarrow R_3SiON=C(R')R'' + C_5H_5N.HCl.$$
 Physical constants and analytical data will be published shortly. On hydrogenation of these compounds on platinum at room temperature the O-N bond is separated. Differently substituted amines,  $NH_3$ , and trialkyl silanols are formed.

Card 1/2

Organosilicon ~~Esters~~ of Oximes

81557

S/062/60/000/05/07/000  
B004/B066

The hydrolysis of O-triethyl-silyl-propionaldoxime by means of 5% HCl occurs only to 50-60 per cent. The initial compound, the oxime, hexa-ethyl-disiloxene and a resin containing nitrogen were found in the hydrolyzate. The infrared spectrum of all O-trialkyl-silyloximes contains the characteristic frequency  $1636-1640\text{ cm}^{-1}$  which may probably be assigned to the valence vibrations of the C=N bond. ✓

ASSOCIATION: Institut khimii silikatov Akademii nauk SSSR (Institute of Silicate Chemistry of the Academy of Sciences, USSR).  
Leningradskiy gosudarstvennyy universitet im. A. A. Zhdanova (Leningrad State University imeni A. A. Zhdanov)

SUBMITTED: February 29, 1960

Card 2/2

MOLOCHNOV, G.V.; MATVEYEVA, E.T.; OSOKINA, G.N.

Electromagnetic field of a vertical magnetic dipole over a two-layered structured with a steplike boundary. Uch. zap. LGU  
no.286:255-260 '60. (MIRA 14:3)  
(Electromagnetic prospecting)

LORAN, Zh. [Laurent, G.]; PONSO, K.; POTEN'YE, M.; BARANSKIY, L.N.;  
KAZAK, B.N.; MATVEYEVA, E.T.

Some characteristics of magnetic Pc 1 pulsations in magnetically  
coupled regions (Borok-Merguelen station, February, 1964). Geomag.  
1 aer. 5 no.3:499-501 My-Je '65. (MIRA 18:5)

1. Sluzhba ionosfernykh issledovaniy, Parizh (for Loran, Ponso,  
Poten'ye). 2. Institut fiziki Zemli AN SSSR, Moskva (for Baranskiy,  
Kazak, Matveyeva).

MATVEYEVA, E.T.; TROITSKAYA, V.A.

General laws governing the pearl-type mode of oscillations.  
Geomag. i aer. 5 no.6:1078-1084 N-D '65.

(MIRA 19:1)

1. Institut fiziki Zemli AN SSSR. Submitted August 3, 1964.

L 42084-66 EWT(1) CH  
ACC NR: AP6003338

SOURCE CODE: UR/0387/66/000/001/0076/0079

AUTHOR: Troitskaya, V. A.; Shchepetnov, R. V.; Bol'shakova, O. V.; Matveyeva, E. T.

ORG: Institute of Physics of the Earth, AN SSSR (Institut fiziki Zemli AN SSSR)

TITLE: Characteristic properties of rapid variations of the Earth's electromagnetic field in the polar regions

SOURCE: AN SSSR. Izvestiya. Fizika Zemli, no. 1, 1966, 76-79

TOPIC TAGS: electromagnetic terrestrial field, electromagnetic field variation, solar activity, pearl shaped variation, stable variation, polar region, magnetic storm, irregular variation, aurora, magnetically coupled region, magnetic force line, proton, solar cycle

ABSTRACT: During the IGY short-period variation measurements of the electromagnetic field in the polar regions of the Soviet Union were carried out at five Arctic stations (Kheys Island, Barentsburg, Cape Chelyuskin, Tiksi Bay, and Lovozero) and in Antarctica (Mirnyy and Oasis). Analysis of data obtained showed that the properties of the polar regions are associated with the cycle of solar activity. Especially rapid irregular variations of type P11 and the frequency of excitation of pearl-shaped variations Pcl depend upon the solar cycle. The daily rate of these variations differs from those at middle latitudes. Soviet observatories noted giant pulsations of types

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UDC: 550.385.3

51  
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L 42084-66

ACC NR: AP6003338

Pg and Lpc in the polar regions. Simultaneous excitations of stable variations occur in the polar regions during equinoxes and very seldom during solstices.

Regular stable variations are typical of polar and other latitudes. Stable variations of type Lpc occur mostly in the polar regions. Their vibrations last 3—7 min. This type of variation takes place in middle latitudes only in magnetic storms, appearing mostly at noon. Rapid irregular variations of type Pil occur with high intensity in the auroral zone where their amplitude reaches hundreds of mv/km. The amplitude of Pil variations diminishes rapidly to the north and south of the auroral zone. This type of variation occurs before midnight and in the morning hours. The Pil-type variations are very much associated with auroras. The appearance of these variations testifies to the development of auroral processes in the upper atmosphere.

Special interest was aroused by the pearl-shaped variations. Figure 1 shows this type of variation which was obtained on 6 August 1964 at Tiksi Station. Long-term records at USSR observatories made it possible

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ACC NR: AP6003338

Tiksi St. 6 August 64

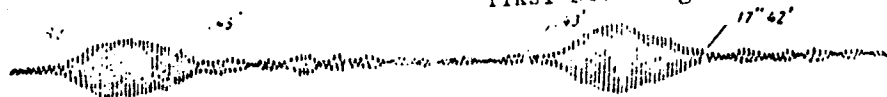


Fig. 1. Pearl-shaped magnetic vibrations

to conclude that the frequency of appearance of these variations increases with the decrease of the latitude of the observation point. This kind of variation occurs in magnetically coupled regions. The formation of pearl-shaped variations is hypothesized to be a movement of accumulated particles around a magnetic force line. Traveling from one hemisphere to the other along the force line between magnetically coupled points, the particle cluster increases the intensity of the magnetic field in the direction towards which the cluster moves while decreasing the magnetic field intensity behind it. The increased field causes intense vibrations which form the pearl. Another hypothesis explains this formation by magnetohydrodynamic waves which propagate from one hemisphere to the other.

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ACC NR: AP6003338

Experimental simultaneous observations were carried out in two magnetically coupled points, Sogray in the USSR and on the French island of Kergelen in the Indian Ocean. Processing of recorded data led to the following conclusions: 1) Maxima of individual pearls in opposite hemispheres are shifted by a half-period. Periods of envelopes over the pearls are preserved in both hemispheres. 2) No delay in phases was observed when the movement was from east to west. 3) Periods of pearl formation in coupled regions are equal. These data cannot be considered as a support of either the first or the second hypothesis.

Orig. art. has: 3 figures. [ATD PRESS: 4172-F]

SUB CODE: 08, 03 / DATE SUBM: 08Apr64 / ORIG REF: 004 / OTH REF: 006

Cord 4/4 af

SOURCE CODE: UR/0203/66/006/003/0533/0540

ACC NR: AP6018919

AUTHOR: Troitskaya, V. A.; Bol'shakova, O. V.; Matveyeva, E. T.

ORG: Institute of Physics of the Earth, AN SSSR (Institut fiziki zemli AN SSSR)

TITLE: Sudden electromagnetic field variations as an indicator of the state of the radiation belts and the magnetosphere of the earth

SOURCE: Geomagnetizm i aeronomiya, v. 6, no. 3, 1966, 533-540

TOPIC TAGS: ~~Van Allen~~ radiation belt, geomagnetic measurement, geomagnetic field, magnetosphere, electromagnetic field, scientific spacecraft

ABSTRACT: Changes in the position of the boundary between the magnetosphere and the external radiation belts, brought about by excited stable oscillations and intensity changes in the belts as a function of excited irregular short-period oscillations, are investigated. The measurements were made by Electron-1, Electron-2, and Explorer-XII satellites. The data show that: 1) The boundary between the magnetosphere and the radiation belts fluctuates about its mean position  $\sim 10R_e$ , where  $R_e$  is the radius of the earth; 2) Geomagnetic field oscillations of Pc4 type (50-150 sec) are observed when the boundary is located at a distance of  $10R_e$  or more; 3) Geomagnetic field oscillations of Pc2 and Pc3 types (5-40 sec) appear when the boundary moves toward the earth; 4) The extremum values of the boundary positions vary from  $7.5 R_e$  to  $12.5 R_e$ .

UDC: 550.385

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ACC NR: AP6018919

5) Periods of stable oscillations (T) are proportional to  $R^5$ , where R is a radius of the magnetosphere; 6) The existence of stable oscillations (Pc) in the main storm phase may indicate that the compression of the magnetosphere continues during this phase; 7) Intensity changes in the radiation belts are closely connected with the introduction of charged particles into the upper atmospheric layers; and 8) The presence of irregular short-period oscillations of "pearl" type (Pcl) is connected with sharp intensity changes in the radiation belts. Orig. art. has: 9 figures. [14]

SUB CODE: 08,22/  
ATD PRESS: 5763

SUBM DATE: 14Aug65/

ORIG REF: 008/

OTH REF: 005

Cord 2/2 *RF*



MATVEYEVA, F. A.

1. MIZEROVA, T. P. MATVEYEVA, F. A. KAZARINOV. V. P.

2. USSR (600)

4. Kaolin-Balayskiy Deposits

7. Report on the prospecting work at the Kraval'skiy section of the Balayskiy Kaolin depoists in 1940. (based on materials of B. N. Valukhov)  
Izv. Glav. upr. geol. fon. no. 47.

9. Monthly List of Russian Accessions. Library of Congress, March 1953. Unclassified.

MATVEYEVA, F.A.

Matveyeva, F.A. "Ceramic clays of Western Siberia," in symposium:  
Syr'yevyye resursy tonkokeram, prom-sti SSSR i puti ikh ispol'zovaniya,  
Moscow-Leningrad, 1948, p. 177-83

S0: U-2888, Letopis Zhurnal'nykh Statey, No. 1, 1949

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 1, 15-57-1-731  
p 116 (USSR)

AUTHORS: Matveyeva, F. A., Plekhanova, Ye. A.

TITLE: Acid-Resistant Ceramics From Siberian Raw Material  
(Kisloutopornaya keramika iz sibirskogo syr'ya)

PERIODICAL: Tr. khim-metallurg. in-ta. Zap-Sib. fil. AN SSSR,  
1955, Nr 9, pp 3-17.

ABSTRACT: Experiments have been conducted to manufacture acid-resistant and earthenware ceramic products from clays of the Yevsinskoye-Dorogino mestorozhdeniye (deposit) in the Novosibirskaya Oblast.. The variegated, light-colored clays from the Dorogino part of the deposit were used. The chief properties of these clays are given in the Table (in percent). The yield strength during shearing of air dried material is 3.6 kg/cm<sup>2</sup>. Caking occurs at 1150° to 1200°. To obtain a ceramic body with high density, acid-resistance, thermal stability, and mechanical strength, it is necessary to

Card 1/3

15-57-1-731

## Acid-Resistant Ceramics From Siberian Raw Material (Cont.)

add to the Doroginskoye clays refractory, slightly sintered, sufficiently plastic clays and feldspar as fluxing material; grog must also be added. The author recommends the following proportions for the paste (in percent): light-colored Dorogino clays, 35 to 45; refractory, sintered, sufficiently plastic clay, 25; feldspar, 10 to 15; admixture (grog from the Dorogino clays, porcelain rubble, etc.), 20 to 25. It is possible to obtain a variety of acid-resistant ceramic products from this combination.

Chemical composition						Fire-resistance °C
SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	CaO	MgO	Others	
68.22	19.42	3.45	0.60	0.83	4.84	1520

Card 2/3

To card 3/3



15-57-1-731  
 Acid-Resistant Ceramics From Siberian Raw Material (Cont.)

Grain-size distribution (fraction units in mm)							
0.25	0.25- 0.05	0.05- 0.02	0.02- 0.01	0.01- 0.005	0.005- 0.002	0.002- 0.005	0.0005
0.3	0.08	13.30	12.85	19.41	16.21	19.72	18.13

Card 3/3

S. P. Sh.

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 1,  
pp 116-117 (USSR) 15-57-1-736

AUTHORS: Matveyeva, F. A., Plekhanova, Ye. A.

TITLE: The Chemical Stability of Ceramic Tile From Clays in  
the Doroginskoye Mestorozhdeniye (Deposit) in the  
Novosibirskaya Oblast (Khimicheskaya stoykost'  
keramicheskikh plitok na osnove glin Doroginskogo  
mestorozhdeniya Novosibirskoy oblasti)

PERIODICAL: Tr. khim-metallurg. in-ta. Zap-Sib. fil. AN SSSR,  
1955, Nr 9, pp 19-36.

ABSTRACT: Studies of the chemical stability of acid-resistant  
tile, obtained under laboratory conditions from the  
clays of the Yevsinsko-Doroginskoye deposit in the  
Novosibirskaya Oblast', have shown that these tiles  
have a higher index than tiles from the Shchekinskiy  
zavod (factory). This fact is explained by a higher  
development of mullite and greater density in the body

Card 1/2

The Chemical Stability of Ceramic Tile From Clays (Cont.) 15-57-1-736

of the tile made from the Doroginskoye clays. Of these tiles, those with a water absorption less than two percent have a greater chemical stability than those with a water absorption in the interval from two to four percent. The tile from the Dorokinskoye clays may be used in the chemical industry for acid-resistant material.

Card 2/2

S. P. Sh.

MATVEYEVA, F A

USSR/Chemical Technology - Chemical Products and Their Application. Silicates.  
Glass. Ceramics. Binders, I-9

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 62314

Author: Matveyeva, F. A., Plekhanova, Ye. A.

Institution: None

Title: Concerning the Use of Acid-Resistant Tile Made from Clays of  
Doroginsk Deposit in Novosibirsk Oblast in the Chemical Industry

Original

Periodical: Tr. khim.-metallurg. in-ta Zap. Sib. fil. AN SSSR, 1955, No 9,  
37-49

Abstract: Presentation of the results of tests of chemical stability of  
ceramic tiles made from Doroginsk clay, under conditions of uti-  
lization at a coke and chemicals plant. The procedure of testing  
in production apparatus with exposure to various caustic media is  
described. Tests over prolonged periods were made of tiles made  
from Doroginsk clay having different density and water absorption  
of <2% and 2 to 4% and of tiles of the Khar'kov plant having a water

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USSR/Chemical Technology - Chemical Products and Their Application. Silicates.  
Glass. Ceramics. Binders, I-9

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 62314

Abstract: absorption of 4 to 6%. The tests showed that tiles made from Doroginsk clay, under operational conditions are stable or relatively stable on exposure to hot  $H_2SO_4$  of 3-6% concentration and unstable in alkaline media and entirely unstable in 93%  $H_2SO_4$  and 15% NaOH at  $100^\circ$ . Corrosion in caustic media under operational conditions occurs more rapidly than under laboratory conditions. The method specified in the standard (GOST 473-53) for determination of acid-stability of ceramic materials is very little reproducible of operational use of acid-resistant materials.

Card 2/2

SOV/137-58-7-14109

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 19 (USSR)

AUTHOR: Matveyeva, F. A.

TITLE: Raw Refractories for the Kuznetsk Metallurgical Kombinat  
(Ogneupornoye syr'ye dlya Kuznetskogo metallurgicheskogo kombinata)

PERIODICAL: Izv. vost. fil. AN SSSR, 1957, Nr 12, pp 120-121

ABSTRACT: A brief communication is presented on a scientific and engineering conference held at Stalinsk, June 19-20, 1957, on the subject "Prospects for Refractory Raw-materials Supply to the Kuznetsk Metallurgical Kombinat". The papers presented dealt with the results of comprehensive studies of the Berezovo and Barkinsk occurrences of refractory clays, which are to constitute a local source of raw refractories for the Kuznetsk Metallurgical Kombinat and free it from long-distance hauls of clays from the Moysk deposit. Geological prospecting has discovered occurrences of high-alumina clays in the Barzas rayon. 1. Clays--Availability 2. Clays--Sources 3. Refractory materials --Production

Card 1/1

Ya. G.

ZABOLOTSKIY, T.;<sup>VE</sup>MAT~~Y~~YEVA, F.;PETRINKO, A.

Primary organization of the institute serves enterprises. WFO no.12:  
53 D '59 (MIRA 13:3)

1. Chleny Vsesoyuznogo khimicheskogo obshchestva imeni Mendeleyeva  
Khimiko-metalluricheskogo instituta (g. Novosibirsk).  
(Novosibirsk--Research, Industrial)

MATVEYEVA, F.A.

Methodology of electron microscopic study of the formation of  
mellite. Trudy Khim.-met.inst.Sib.otd.AN SSSR no.17:3-10 '61.

(MIRA 15:8)

(Mellite)

(Electron microscopy—Technique)



MATVEYEVA, F.A.; PLEKHANOVA, Ye.A.

Effect of iron oxide on the morphology of mullite. Trudy Khim.-  
met.inst.Sib.otd.AN SSSR no.17:11-15 '61. (MIRA 15:8)  
(Mullite) (Iron oxides)

MATVEYEVA, F.A.

High alumina content clays of the Barzas deposit. Report No.1:  
physicochemical characteristics of the clays. Trudy Khim.-met.  
inst.Sib.otd.AN SSSR no.17:17-25 '61. (MIRA 15:8)  
(Barzas region--Clay--Analysis)

MATVEYEVA, F.A.; MELEKHOVA, T.F.

High alumina content clays of the Barzas deposit. Report No.2:  
Obtaining high alumina content refractories. Trudy Khim.-met.  
inst.Sib.otd.AN SSSR no.17:27-38 '61. (MIRA 15:8)  
(Barzas region--Clay--Analysis) (Refractory materials)

MATVEYEVA, F.A.; PLEKHANOVA, Ye.A.

Mineralogical characteristics of the raw material for aluminum  
silicate refractories of the Kuznetsk Metallurgical Plant.  
Trudy Khim.-met.inst.Sib.otd.AN SSSR no.17:47-59 '61.

(MIRA 15:8)

(Novokuznetsk--Refractory materials) (Clay--Analysis)

MATVEYEVA, F.A.; DOSIK, M.M.

Thermal study of easily liquefiable clays of some Siberian  
deposits. Trudy Khim.-met.inst.Sib.otd.AN SSSR no.17:61-75 '61.  
(MIRA 15:8)

(Siberia--Clay--Analysis)

~~MATVEYEVA~~, F.A., kand. tekhn. nauk, otv. red.; MELEKHOVA, T.F.,  
nauchn. sotr., zam. otv. red.; KVIATKOVSKAYA, K.K.,  
kand. tekhn. nauk, red.; KOSHLIYAK, L.L., kand. tekhn.  
nauk, red.; PLEKHANOVA, Ye.A., nauchn. sotr., red.;  
SNITSARENKO, A.A., red.

[Prospects of the development of the ceramic industries  
of Siberia and of the Far East; materials] Perspektivy  
razvitiia keramicheskoi promyshlennosti Sibiri i Dal'nego  
Vostoka; materialy. Novosibirsk, Red.-izd. otdel Sibirsko-  
go otd-niia AN SSSR, 1964. 183 p. (MIRA 17:11)

1. Soveshchaniye po khimii i tekhnologii keramiki i per-  
spektivam razvitiya keramicheskoy promyshlennosti Sibiri  
i Dal'nego Vostoka. Novosibirsk, 1962. 2. Khimiko-  
metallurgicheskii institut Sibirskogo otdeleniya AN SSSR  
(for Matveyeva). 3. Gosudarstvennyy nauchno-issledovatel'-  
skiy institut stroitel'noy keramiki (for Kvyatkovskaya,  
Koshlyak).

ACC NR: AP7005631 (AV) SOURCE CODE: UR/0413/67/000/002/0088/0088

INVENTOR: Galashina, M. L.; Matveyeva, G. A.; Sobolevskiy, M. V.; Chernyshev, Ye. A.; Tolstikova, N. G.

ORG: none

TITLE: Method of preparing polymethylthienylsiloxanes. Class 39, No. 190571

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1967, 88

TOPIC TAGS: siloxane, alkylchlorosilane, thienylsiloxane, trimethylchlorosilane, polycondensation, hydrolytic polycondensation

ABSTRACT: An Author Certificate has been issued for a method of obtaining polymethylthienylsiloxanes by hydrolytic polycondensation of dimethyldichlorosilane, trimethylchlorosilane, and thienyl-substituted alkylchlorosilane. To increase the thermal stability of the obtained polymethylthienylsiloxanes, bis(dimethylchlorosilyl) thiophene is used as the thienyl-substituted alkylchlorosilane. [Translation] [NT]

SUB CODE: 11/SUBM DATE: 05May65/

Card 1/1

UDC: 678.84:547.732

15 (2)

AUTHORS:

Buneyeva, L. I., Gorshkova, Z. S., SOV/72-59-9-4/16  
Matveyeva, G. L., Karisma, N. E., Etverk, R. E.

TITLE:

Attempt to Organize the Production of Electro-insulators in  
the Yarovakandi Works

PERIODICAL:

Steklo i keramika, 1959, Nr 9, pp 16 - 20 (USSR)

ABSTRACT:

A great amount of experimental work has been carried out during the last years to create new designs of insulators made of glass with low alkali content, of the type 13 v. As can be seen from figure 1, the 13 v-glass possesses a sufficiently great temperature range to make the manufacture of products by various methods possible. The Vsesoyuznyy elektrotekhnicheskiy institut (All-Union Electrotechnical Institute), and the Institut stekla (Glass Institute) worked out various designs of glass insulators, and the experimental glass works of the Glass Institute the production technology. A mass production of the insulator types TS-2, TS-3 and ShS-10 was organized. The Glass Institute and GSPKB of the Orel sovnarkhoz have worked out a mechanized conveyer-line production of the insulators. At the beginning of 1959 it was decided to start

Card 1/2



Attempt to Organize the Production of Electro-  
insulators in the Yarvakandi Works

SOV/72-59-9-4/16

the industrial production of insulators made from 13v-glass at the Yarvakandi works in Estonia. The cross sections of the furnace used are shown in figures 2 and 3. The chemical composition of the raw materials used is shown in a table. Furthermore, the melting of the glass 13v, the pressing of the insulators, and their tempering in the OP-36, are described. The temperature conditions for the tempering of the products are shown in figure 4; they were calculated by S. G. Lloznyanskaya. The quality control of the insulators is carried out by a polarimeter and a test on thermal stability. The insulators TS-3 and ShS-10 are at present being mass-produced at the Yarvakandi works. There are 4 figures and 1 table.

Card 2/2

L 3B256-66 EWT(m)/EWP(e) WH

ACC NR: AP6028678

SOURCE CODE: UR/0104/66/000/005/0070/0074

AUTHOR: Koshulchov, V. K. (Candidate of technical sciences); Rogatyeva, T. A. (Engineer); Buzareva, L. M. (Candidate of technical sciences); Polotskaya, G. B. (Engineer); Matveyeva, G. I. (Engineer); Glushchenko, V. M. (Engineer)

ORG: none

TITLE: Suspended insulators for 750-Kv lines

SOURCE: Elektricheskiye stantsii, no. 5, 1966, 70-74

TOPIC TAGS: insulating material, high voltage line, glass product, glass property

ABSTRACT: New insulators, made of low-alkali glass, will allow 750-kv lines to be suspended from a single chain of insulators per pole or mast, simplifying the installation of the lines. The insulators have a guaranteed electromechanical strength of 30 t. It was determined that 27-28 elements in a chain are sufficient for usage in 750 kv lines. They can also be used in case of lower voltages where high mechanical strength is required, such as river crossings, etc. The technology of hand pressing of the glass parts has been so developed that mechanized production is possible. Improvements should be made in two areas: increasing the length of the leakage path for usage in regions with high pollution and reduction of the height of the insulator and head diameter (by using cylindrical heads, rather than the conical heads now used). Orig. art. has: 5 figures and 1 table. [JPRS: 36,501]

SUB CODE: 13, 11 / SUBM DATE: none

Card 1/MLP

UDC: 621.513.624.001.5

AID P - 3755

Subject : USSR/Chemistry

Card 1/1 Pub. 152 - 19/22

Authors : Zil'berman, Ye. N. and G. N. Matveyeva

Title : Products resulting from the interaction of hexamethylene diamine with some inorganic acids

Periodical : Zhur. prikl. khim. 28, 9, 1013-1016, 1955

Abstract : Mixtures of basic salts with neutral salts and free hexamethylene diamine were obtained in the reactions of hexamethylene diamine with sulfuric and with nitric acids. Eleven references, 2 Russian (1947-1953).

Institution : None

Submitted : Mr 19, 1954

S/190/61/003/001/011/020  
B119/B216

AUTHORS: Smolyan, Z. S., Grayevskiy, A. I., Demin, O. I., Fukin, V. K.,  
Matveyeva, G. N.

TITLE: Certain rules on polymerization of ethylene on heterogeneous  
catalysts

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 1, 1961, 81-83

TEXT: The authors point out the fact that the catalysts of the type  
 $TiCl_4$  plus organometallic alkylating agent used for the preparation of low-

pressure polyethylene rapidly lose their high activity in the course of the  
reaction, dropping to one sixth of the initial activity within 30 to 40 min.  
The present work attempts to find the causes for this drop in activity.  
Experiments were carried out on polymerization of polyethylene on catalysts  
of the systems  $TiCl_4 + AlR_3$  ( $Al(C_2H_5)_2Br$ ,  $AlC_2H_5Cl_2$ ,  $Al(C_2H_5)_2OC_2H_5$ ,  
 $Al(C_2H_5)_3$ ,  $AlC_2H_5Cl(OC_2H_5)$  and other compounds). Polymerization was per-  
formed in an autoclave at 60°C and a pressure of 4 atm. abs. Individual

Card 1/2

Certain rules on polymerization of...

S/190/61/003/001/011/020  
B119/B216

catalysts were prepared by mixing the components under argon in a special thermostat and kept there for use. Catalyst activity was determined from the initial polymerization rate and, with the same results, from the polyethylene yield. It was found that the activity of all the catalysts is low at the very outset but increases to a maximum within 4 to 6 min. and then drops to practically zero within another 20 to 30 min. The same effect was observed on catalysts removed from the argon atmosphere and placed in the reaction vessel in the absence of ethylene for polymerization. The authors found that the activity of a catalyst of the type under study depends on the concentration ratio of  $Ti^{3+}$  and  $Ti^{4+}$  (low initial activity due to the sole presence of  $Ti^{4+}$ , maximum activity on reaching the optimum  $Ti^{3+} : Ti^{4+}$  ratio, followed by decrease with increasing  $Ti^{3+}$  content). Further experiments showed that the optimum  $Ti^{3+} : Ti^{4+}$  ratio and thus also the maximum activity may be maintained constant by careful addition of a corresponding quantity of oxidizing agent (to reoxidize excess  $Ti^{3+}$ ). Air and  $O_2$ , respectively, were used as oxidizing agents. There are 3 figures and 3 non-Soviet-bloc references.

Card 2/2

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B110/B138

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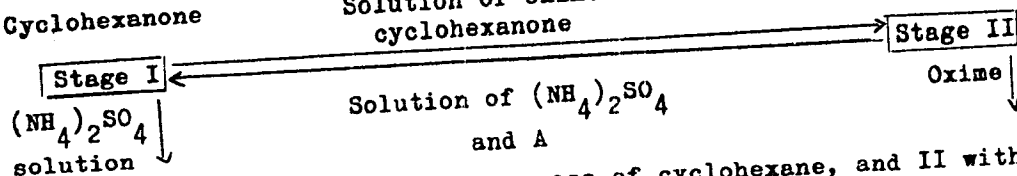
AUTHORS: Kotlyar, I. B., Matveyeva, G. N., Smolyan, Z. S., Fogel',  
Ts. I., Gulyakov, V. M., Kudryavtsev, Ye. N.

TITLE: Continuous method of producing cyclohexanone oximes

PERIODICAL: Khimicheskaya promyshlennost', no. 1, 1962, 18 - 19

TEXT: A two-stage, continuous method of oxime production has been developed. Not only could it be automated, it also produces better quality oximes, and reduces losses of hydroxylamine hydrosulfate (A):

Cyclohexanone      Solution of oxime in cyclohexanone      Solution of A



Reaction I is conducted with an excess of cyclohexane, and II with an excess of A. The formation of cyclohexanone oximes follows the reaction

Card 1/02

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B110/B138

Continuous method of producing...

$$2 \text{C}_6\text{H}_5\text{O} + (\text{NH}_2\text{OH})_2 \cdot \text{H}_2\text{SO}_4 \rightarrow 2 \text{C}_6\text{H}_5\text{NOH} + \text{H}_2\text{SO}_4 + \text{H}_2\text{O}$$
 with  $\text{H}_2\text{SO}_4$  being neutralized by  $\text{NH}_3$ . Thus, the acidity indicates the stage of oxime formation. Preliminary experiments were carried out to determine  $\tau$ , the contact period which must elapse before the acidity of the reacting mass becomes constant, and the percentage extraction of A as dependent on its concentration in the initial sulfate solution. Results:  $\tau = 15 - 20$  min; optimum A concentration  $\sim 20$  g/liter. B and the stage II sulfate solution containing 20 - 25 g/liter of A pass continuously into oximator 1 (Fig. 1) of stage I. The resulting mixture is passed into 2, where it is neutralized with gaseous  $\text{NH}_3$ . The bottom layer in separator 3, spent sulfate solution, is passed into an evaporator, the upper one (oxime solution and B) into collector 4, and thence into stage II oximator 5, where it is mixed with a new A solution.  $\text{NH}_3$  is used in the stage II neutralizer 6. The upper oxime layer in separator 7 passes to the next stage, and the sulfate solution passes via collector 8 into oximator 1. A stoichiometric ratio must be preserved between the fresh amounts of B and A fed into 1 and 5. There are 1 figure and 2 tables.

Card 2/0 2

**SERDENKO, V.M.; MATVEYENKO, G.O.; MARKIVS'KIY, B.A.**

Work of caterpillar tractors in plowing with regular plows and with  
plows without moldboards. Visnyk AN URSS 26 no.11:44-52 1955.  
(Caterpillar tractors) (MIRA 9:2)



MATVEYEVA, Galina Sergeyevna; ROSECHIN, S.K., otv.red.; LIOZNOV, A.G.,  
red.izd-va; TSIGEL'MAN, L.T., tekhn.red.

[Socialist transformation of agriculture in the Mongolian People's  
Republic] Sotsialisticheskie preobrazovaniia v sel'skom khoziaistve  
Mongol'skoi Narodnoi Respubliki. Moskva, Izd-vo vostochnoi lit-ry,  
1960. 113 p. (MIRA 13:3)

(Mongolia---Agriculture)

COUNTRY : USSR

K

SUBJECT : Forestry. Forest Cultures.

REF. JOURN. : Lesn. i Lesn.-Biologiya, No. 5, 1956, No. 20150

Author : Matveyeva, G.V.

INSTIT. : Moscow Forest Technology Institute

TITLE : The Effect of Drying Out of the Acorns and Mechanical Damage to the Roots on the Viability and Growth of Oak Saplings.

ORIG. PUB. : Nauchno-tekhn. Inform. Mosk. lesotekhn. inst, 1956, No.23, 29-42

ABSTRACT : Observations conducted at Moscow Forest Technology Institute (1952-1953) have shown that sprouting acorns preserve moisture better and produce better results than those which are not germinated both when they have been quickly dried out in the sun before planting which can be in the field, and also when they are dried during winter storage. Acorn storage in the cellar without strewing sand has little effect on germination, although it does lessen

CARD : 1/2

MATVEYEVA, G.V.

USSR/Forestry - Forest Biology and Typology.

K-1

Abs Jour : Ref Zhur - Biol., No 20, 1953, 91487

Author : Matveyeva, G.V.

Inst : Moscow Forest Technology Institute.

Title : The Accumulation of Phosphorus by the Shoots of Various Trees.

Orig Pub : Nauchn. dokl. vyssh. shkoly. Lesnizh., dolo, 1953, No 1, 35-38.

Abstract : Experiments with the radioactive isotope  $p^{32}$ , carried out by the Forest Technology Institute in Moscow, have shown the following intensities of accumulation of phosphorus: In the pine-tree, a very high accumulation of  $p^{32}$  has been observed in the growing parts, a low one in the cotyledon and the stem. In the spruce-tree, the accumulation is weak in the cotyledon, but faster by a factor of

Card 1/3

USSR/Forestry - Forest Biology and Typology.

K-1

Abs Jour : Ref Zhur - Biol., No 20, 1958, 91487

2-3 in the growing parts and in the stem; no isotopes have been detected in the endospermium and in the bark. The accumulation of  $P^{32}$  in the same manner proceeds in the shoots of the larch. In the oak,  $P^{32}$  is distributed relatively slowly (in the growing parts on the 7th day, in the graft cotyledons later); the major part of the  $P^{32}$  was in the main root and the growth cones; a smaller amount was in the stem.  $P^{32}$  does not penetrate into the whole thickness of the cotyledon. In the yellow acacia, the accumulation of  $P^{32}$  is slow, and takes place essentially in the stem; it is completely missing in the cotyledon. Data is compiled on the accumulation of  $P^{32}$  in the shoots of the green ash-tree (*Fraxinus pubescens* Lam.) pear tree, the apple tree and the tartar honey suckle. It is noted that the cotyledon of species which have accumulated  $P^{32}$  clearly shows signs of growth. The accumulation of the isotope in the cotyledon has to be connected

Card 2/2

- 1 -

MATVEYEVA, G.V.

New data on the stratigraphy of Quaternary sediments in the central  
Timan Ridge. Inform.sbor. VSEGEI no. 52:5-22 '62. (MIRA 15:11)  
(Timan Ridge--Geology, Stratigraphic)

GO. OVNIN, Vasilii Mikhaylovich (1776-1831); DIVIN, V.A., otv. red.;  
M. IVEYEVA, G.Ye., red.; KIR'YANOVA, Z.V., mlad. red.

[Captain of the Navy Golovnin's voyage around the world on  
the sloop of war "Kamchatka" in 1817, 1818 and 1819] Pute-  
shestvie vkrug sveta, sovershennoe na voennom shliupe  
"Kamchatka" v 1817, 1818 i 1819 godakh flota kapitanom  
Golovninym. Moskva, Mysl', 1965. 383 p. (MIRA 18:9)

ATSARKIN, V.A.; GERASIMOVA, E.A.; MATVEYEVA, I.G.; FRANTSESSON, A.V.

Paramagnetic resonance of a trivalent chromium ion in the  
crystal lattice of magnesium tungstate. Zhur. eksp. i teor.  
fiz. 43 no.4:1272-1274, 0 '62. (MIRA 15:11)

1. Institut radiotekhniki i elektroniki AN SSSR.  
(Paramagnetic resonance and relaxation)  
(Chromium)  
(Magnesium tungstate crystals)

*Fuel Abstracts*

*Source: Properties - B.*

3162, COALS OF CHEREKHUV DEPOSIT. Matysheva, I.I. (Trudy Vsesoyuz. Nauch.-Issled. Inst. Iskusst. Zhid. Topliva i Gaza (proc. All Union sci.-res. Inst. synthetic liquid Fuel and Gas). 1950, (2), 5-27, abstr. in Chem. Abstr., 1952, vol. 46, 5815). Chemical analyses of coal and ash of samples taken from various parts of this deposits and results of tests of coking, hydrogenation, and gasification of this coal are given.  
C.A.



*Fuel Abstracts*

*Source: Properties - B*

3184. SAPROPELITES OF BUDAGOVSK DEPOSIT. Matveeva, I.I. (Trudy Vsesoyuz. Nauch. Issled. Inst. Iskusst. Zhid. Topliva i Gaza (Proc. All Union sci. res. inst. synthetic liquid Fuel and Gas). 1950, (2) 43-51. abstr. in Chem. Abstr., 1952, vol. 46 5815). Chemical analyses of the coal and ash, and of distillation products are given. The average ash content (dry basis) was 40.0 and S 0.6%. Volatile matter (combustible basis) was 75.0% and the average calorific value (on same basis) 8600 kcal./kg. Distillation yielded 42% (combustible basis) of primary tar.

C.A.

CA

21

Coals of the Dabergalan deposit. I. I. Matveeva  
Trudy Vuzovsk. Nauch.-Issledovatel. Inst. Khimii  
Zhidkogo Topliva i Gasa VNIIGI 1980, No. 2, 66-70. -The  
chem. and phys. analyses of the coal and ash, and hydro-  
genation and coking test are reported. M. Horsch

*Fuel Abstracts*

*Sources & Properties - B.*

3187. CHARACTERISTICS OF COALS OF ANGREN DEPOSIT. Matveeva, I.I. and Nefed'eva, O.V. (Trudy Vsesoyuz. Nauch. Issled. Inst. Tekhn. Zhid. Topliva i Gasa (Proc. All Union sci.-res. Inst. synthetic liquid Fuel and Gas), 1950 (2) 76-86, ab str. in Chem. Abstr., 1952, vol. 46, 5815). The coal is of the lean brown variety. It contains up to 15% of alkali-soluble humic acids and only 1-1.5% of extractable bitumens. This coal is suitable mainly for local consumption. CC Chemical and physical analyses and test results are given.  
C.A.

K

1030. INVESTIGATION OF NATURE OF NON-CAKING COALS BY HYDROGENATING THEM BELOW THEIR DECOMPOSITION TEMPERATURES. Kukharenko, T. A. and Matveyeva, I.I. (Zh. Priklad. Khim. (J. Appl. Chem.)), July 1950, vol. 23, 732-738).

Effect of the above on coals typical of the borderline between brown and hard coals was investigated; especially the influence of hydrogenation on final composition of coke and types and amounts of by-products.

8-277-1000-1000

METALLURGICAL LITERATURE CLASSIFICATION

SELECT ONE OR MORE

CLASS	NUMBER	DATE	BY	FOR	REMARKS
1	1	1	1	1	1
2	2	2	2	2	2
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97	97	97	97	97	97
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100	100	100	100	100	100

*Hydrogenation  
Products (2)*

Investigating the nature of noncaking coals by hydrogenating them below their decomposition temperatures. T. A. Kukharenko and L. I. Matusev. *J. Applied Chem. U.S.S.R.* 23, 773-8 (1950) (Engl. translation).—Coal, lying between brown and bituminous coal, can be hydrogenated to acquire the caking capacity of good caking coal at 60-100 atm. and 350-380°. The per cent C increased 3% without change in the per cent H. The per cent total volatile and functional groups decreased. The compn. of the humic acids is unchanged, but the amt. decreases. The yield of primary tar was doubled (from 7-10 to 14-20%); the semicokes increased (74-78%), but the gas + bones decreased (6.69 to 1.77%). The compn. of the tar showed less asphalt but the same per cent phenols + paraffins. Hydrogenation involves a simplification of the structure of the most complex part of the coal (shown by heat of wetting with MeOH) plus reduction of the difficultly reducible humic acids. The oxidation of a coal can be estd. from the change in its ultimate analysis on hydrogenation. Earl S. McColey

MATVEYEVA, I. I.

"Coal From the Southern Ural Basin." Sub 8 Oct 51, Inst of  
Mineral Fuels, Acad Sci USSR. *Coal Chem Sci.*

Dissertations presented for science and engineering degrees in  
Moscow during 1951.

SO: Sum. No. 480, 9 May 55

6

Metal nitrides. II. Strontium and Barium subnitrides.  
S. M. Arty, R. A. Prokof'eva, and I. I. Mar'eva (Leningrad State Univ. J. *Zhur. Obshchei Khim.* 23, 614-9 (1955); *J. C.A.* 44, 12522c.—The existence of  $\text{Sr}_3\text{N}$  and  $\text{Ba}_3\text{N}$  was established. Calorimetric detn. gave for the enthalpy of formation of  $\text{Ba}_3\text{N}$   $-53.4 \pm 2$  kcal./mole. J. R. L.

2

14/05

ARIYA, S.M.; ZASLAVSKIY, A.I.; MATVEYEVA, I.I.

Chemistry of the compounds of a variable composition. Part 4.

System tantalum -- selenium. Zhur.ob.khim. 26 no.9:2373-2375

S '56.

(MLRA 9:11)

1. Leningradskiy gosudarstvennyy universitet.  
(Tantalum) (Selenium)



GERLING, Erik Karlovich. Prinimali uchastiye: YASHCHENKO, M.L., starshiy nauchnyy sotrudnik; YERMOLIN, G.M., starshiy nauchnyy sotrudnik; TITOV, N.Ye., mladshiy nauchnyy sotrudnik; APANAS'YENVA, L.I., mladshiy nauchnyy sotrudnik; KOL'TSOVA, T.V., mladshiy nauchnyy sotrudnik; OVSHINNIKOVA, G.V., mladshiy nauchnyy sotrudnik; SHUKOLYUKOV, Yu.A., mladshiy nauchnyy sotrudnik; LEVSKIY, L.K., mladshiy nauchnyy sotrudnik; MOROZOVA, K.M., mladshiy nauchnyy sotrudnik; MATVEYEVA, I.I., mladshiy nauchnyy sotrudnik; BARKAN, V.G., mladshiy nauchnyy sotrudnik; BARANOVSKAYA, N.V., mladshiy nauchnyy sotrudnik; VARSHAVSKAYA, B.S., mladshiy nauchnyy sotrudnik; SERGEYEV, A.N., starshiy laborant; KURBATOV, V.V., starshiy nauchnyy sotrudnik; KRATTS, K.O., kand.geol.-mineral.nauk, otv.red.; ARON, G.M., red.izd-va; BOGHEVER, V.T., tekhn.red.

[Present status of the argon method for age determination and its use in geology] Sovremennoe sostoyanie argonovogo metoda opredeleniya vozrasta i ego primeneniye v geologii. Moskva, Izd-vo Akad.nauk SSSR, 1961. 130 p. (MIRA 14:12)

1. Radiyevyy institut im. V.G.Khlopina (for Kurbatov).  
(Geological time) (Radioargon dating)

SHUKOLYUKOV, Yu.A.; MATVEYEVA, I.I.

Determination of small amounts of potassium by the isotope dilution method. Zhur.anal.khim. 16 no.5:544-548 S-O '61. (MIRA 14:9)

1. Laboratory of Pre-Cambrian Geology, Academy of Sciences  
U.S.S.R., Leningrad.  
(Potassium--Analysis) (Potassium--Isotopes)

GERLING, E.K.; SHUKOLYUKOV, Yu.A.; MATVEYEVA, I.I.

Age determination of beryls and other minerals containing inclusions  
by the Rb/Sr method [with summary in English]. Geokhimiia no.1:67-  
72 '62. (MIRA 15:2)

1. Laboratory of Geology of the Precambrian, Academy of Sciences,  
U.S.S.R., Leningrad.

(Minerals)(Geological time)

GHERLING, E.K.; SUKOLIUKOV, I.A. [Shukolyukov, Yu. A.]; KOLTOVA, T.V.  
[Kol'tsova, T.V.]; MATVEEVA, I.I. [Matveyeva, I.I.]; IAKOVLEVA,  
S.Z. [Yakovleva, S.Z.]

Determination of age of basic rocks according to the K/Ar method.  
Analele geol geogr 17 no.3:32-40 JI-S '63.

L 00489-66 EWT(1)/T IJP(c)

ACCESSION NR: AP5020565

UR/0294/85/003/004/0623/0826

536.621:53.08

AUTHOR: Smetanina, L. I.; Matveyeva, I. I.; Bruk, Z. V.

TITLE: Calorimetric detector for measuring the energy of an ionized beam

SOURCE: Teplofizika vysokikh temperatur, v. 3, no. 4, 1965, 623-626

TOPIC TAGS: temperature detector, calorimeter, heat transfer, thermal conductivity, ion beam, electron energy

ABSTRACT: The article describes the operating principles and the construction of a calorimeter based on heat transfer by thermal conductivity under steady state conditions. The instrument is applied as a detector for measuring the energy of an ionized beam in a deep vacuum. Choice of materials for the calorimeter must meet the following requirements: 1) the heat conductor must assure the required sensitivity of the instrument and measurement of the energy over a sufficient range and 2) the pickup (the surface turned toward the ionized beam) must have a minimum capacity for "secondary emission" and a stable degree of black-

Card 2/2

L 00489-66

ACCESSION NR: AP5020585

ness. Aluminum and molybdenum give good stability against "secondary emission".  
Orig. art. has: 2 formulas, 1 figure and 1 table

ASSOCIATION: None

SUBMITTED: 04Aug84

ENCL: 00

SUB CODE: TD

NR REF SOV: 001

OTHER: 002

Card 1/2

MATVEYEVA, I. L.

E.K. GERLING, Yu.A. SHUKLEYUKOV, T.V. KOLTSOVA, I.L. MATVEYEVA,  
S.S. LAKOVLEVA (USSR)

"Determination of the Earth age by means of the most ancient minerals and  
rocks"

Report presented at the Conference on Chemistry of the Earth's Crust,  
Moscow, 14-19 Mar 63.

PROKHOROVA, M.I.; MATVEYEVA, I.M.; PUTILINA, F.Ye.; SOKOLOVA, G.P.

Rate of resotation of some plastic and energy-producing substances  
in the brain. Nerv. sist. no. 2:22-30 '60. (MIRA 14:4)  
(BRAIN)



GRIGOR'YEV, D.P.; MATVEYEVA, I.N.

Parallel columnar calcite from green rocks of the Berezovskiy  
gold deposits in the Urals. Izv. vys. ucheb. zav.; geol. i  
razv. 3 no.7:53-58 J1 '60. (MIRA 13:9)

1. Leningradskiy gornyy institut.  
(Ural Mountains---Calcite)

LAZURINA, V.I.; MATVYEVA, I.V.

Technical station in a school. Fiz.v shkole 20 no.4:90-92 J1-Ag  
'60. (MIRA 13:8)

1. 458-ya srednyaya shkola, Moskva.  
(Technical education)

KUTYURIN, V.M.; MATVEYEVA, I.V.

Labile hydrogen atoms of chlorophyll. Biofizika 10 no.4:  
693 '65. (MIRA 18.8)

1. Institut geokhimi i analiticheskoy khimii im. V.I.  
Vernadskogo AN SSSR, Moscow.

MATVEYEVA, I.V.; SLINKIN, A.A., kand.khim.nauk, otv. red.; DULOV, A.A., mladshiy nauchnyy sotr., nauchnyy red.; PRUSAKOVA, T.A., tekhn. red.; RYLINA, Yu.V., tekhn. red.

[Heterogeneous catalysis in organic chemistry; bibliographic index of Soviet and foreign literature (1958-1960)] Geterogen-nyi kataliz v organicheskoi khimii; bibliograficheskii ukazatel' otechestvennoi i zarubezhnoi literatury (1958-1960). Moskva, Izd-vo Akad.nauk SSSR, 1962. 275 p. (MIRA 15:7)

1. Akademiya nauk SSSR. Institut organicheskoy khimii. Sektor seti spetsial'nykh bibliotek.

(Bibliography--Catalysis)

KUTYURIN, V.M.; MATVEYEVA, I.V.; NAZAROV, N.M.; SEMENYUK, K.N.

Effect of light on the isotopic composition of oxygen secreted  
by plants. Dokl. AN SSSR 157 no.6:1474-1476 Ag '64.

(MIRA 17:9)

1. Institut geokhimii i analiticheskoy khimii im. V.I. Vernadskogo  
AN SSSR. Predstavleno akademikom A.P. Vinogradovym.

GEL'SHTEYN, G.G.; MATVEYEVA, I.V.

Differential diagnosis of congenital heart defects. Sov.med.  
28 no.12:47-53 D '65. (MIRA 18:12)

1. Laboratoriya funktsional'noy diagnostiki (zav. - kand.med.  
nauk G.G.Gel'shteyn) i otdeleniye vrozhdennykh porokov serdtsa  
i sosudov (zav. - doktor med.nauk V.I.Burakovskiy) Instituta  
serdechno-sosudistoy khirurgii (direktor - prof. S.A.Kolesnikov;  
nauchnyy rukovoditel' - akademik A.N.Bukulev) AMN SSSR, Moskva.

1ST AND 2ND COVERS										PROCESSING AND PROPERTIES INDEX										3RD AND 4TH COVERS									
MATVEYEVA, K-A																													
CA																				7									
<p>Photocolorimetric determination of chromium in steel. I. V. Tananayev and K. A. Matveyeva. <i>Zavodskaya Lab.</i> 11, 615(1945).—Dissolve 1 g. of sample in 25 ml. of a mixed acid soln. which is 1.8 N in <math>H_2SO_4</math> and 3.75 N in <math>H_3PO_4</math>. Oxidize by dropwise addn. of <math>HNO_3</math>, boil to remove N oxides, add 40 ml. of 15% <math>(NH_4)_2S_2O_8</math>, and heat until a reddish color appears. Discharge the color by careful addn. of NaCl soln. and boil off any <math>Cl_2</math>. Cool, dil. to exactly 100 ml., mix, to a 10-ml. aliquot add 1 ml. of aniline hydrochloride reagent, let stand 10 min., dil. to exactly 50 ml., and measure the color in a photo- color. colorimeter. Calc. the percentage Cr by means of an empirical calibration curve. W. R. Henn</p>																													
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MATVEYEVA, K.A.		7	
<p> <i>CA</i> </p> <p> <i>Simple determination of phosphorus in cast iron. K. A. Matveyeva, Zvezdshaya Lab. 13, 1130-7(1947).—This note describes a method for the determination of phosphorus in cast iron. The sample is dissolved in 20 ml. 6 N HNO<sub>3</sub> and to the solution 0.1 g. of 3% KMnO<sub>4</sub> is added. Remove excess KMnO<sub>4</sub> with Na<sub>2</sub>SO<sub>3</sub>, cool, dil. to 250 ml., and heat a 1-ml. aliquot with 1 ml. of 3 N HNO<sub>3</sub> + 1 ml. NH<sub>4</sub> molybdate reagent. Shake 3-4 times, add 2 ml. H<sub>2</sub>O, and shake. Treat the H<sub>2</sub>O layer with 1 ml. fresh 1% SnCl<sub>2</sub> and compare the blue color with standards; then add more SnCl<sub>2</sub> and repeat the comparison until the color change stops. G. M. K.</i> </p>			
<p>           ASD-11A METALLURGICAL LITERATURE CLASSIFICATION         </p>			
<p>           SOURCE OF INFORMATION         </p>			
<p>           SUBJECT MAP ONLY ONE         </p>			
<p>           ANALYST ONLY         </p>			



MATVEYEVA, K. A.

FDD PA 169T41

USSR/Metals - Ferrous, Ores, Analysis

Aug 50

"Polarographic Determination of Copper in Steel, Cast Iron and Ores,"  
N. V. Tananayev, K. A. Matveyeva, A. B. Dyukov, Nova-Tagil Metallurgical  
Plant

"Zavod Lab" Vol XVI, No 8, pp 1003-1004

Described rapid method for determination of Cu in production control. Polarographic of Cu was conducted in ammonia medium, concentration was determined by height of 2d wave, i.e., at transition of monovalent Cu to metallic state. Determination takes 40 min, accuracy is 0.01-0.02%.

PA 169T41.

MATVEYEVA, K. I.

"Data on the serum therapy of influenza," by F. G. Epshteyn, A. S. Levinson, Z. A. Semashko, A. G. Chetverikov, M. M. Vital, M. A. Belavintseva, K. G. Karatayeva, N. N. Malkova, R. Ye. Gel'shteyn, Ye. G. Korabishcher, A. A. Krums, K. I. Matveyeva,

Voprosy Meditsinskoy Virusologii, Moscow, No. 2, 1949, pp. 278-287

**MATVEYEVA, K.I.**

Use of a biological antiseptic tampon by physicians in first aid practice. Akt.vop.perel.krovi no.7:160-162 '59. (MIRA 13:1)

1. Stantsiya skoroy pomoshchi g. Leningrada.  
(HEMOSTATIC) (FIRST AID IN ILLNESS AND INJURY)

KAMENETSKIY, S.I., dotsent; LYUBOMUDROV, B.Ye.; ZHIVOTOVSKAYA, I.A.;  
MATVEYEVA, K.M.; OFFENGENDEN, S.M. (Donetsk)

Pulmonary diseases in systemic vasculitis. Klin.med. no.12:72-  
78 '61. (MIRA 15:9)

1. Iz kafedry fakul'tetskoy terapii No.2 (zav. - dotsent S.I. Kamenetskiy) Donetskogo meditsinskogo instituta (dir. - dotsent A.M. Ganichkin) i Donetskogo nauchno-issledovatel'skogo instituta fiziologii truda (dir. - kand.med.nauk B.N. Gnopko).  
(LUNGS—DISEASES) (PERIARTERITIS NODOSA)

Matveyeva, K.T.

137-58-5-9317

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 75 (USSR)

AUTHORS: Tarabayev, S.I., Budon, V.D., Matveyeva, K.T.,  
Milyutina, N.A.

TITLE: Direct Leaching of Lead From Sulfide Concentrates (Neposred-  
stvennoye vyshchelachivaniye svintsa iz sul'fidnykh kontsentra-  
tov)

PERIODICAL: Izv. AN KazSSR. Ser. gorn. dela, metallurgii, str-va i  
stroyaterialov, 1957, Nr 4 (15), pp 59-65

ABSTRACT: The process of direct and selective leaching of lead from  
sulfidic polymetallic concentrates by means of acidic chloride  
solutions was studied under laboratory conditions as well as on  
a larger laboratory scale. Optimal leaching conditions for ex-  
traction of up to 97-98% of Pb are shown. Along with Pb, Cd  
(96% of it) and Ag also pass into the solution. Cu, Au, and Bi  
remain entirely in the cakes. The behavior of Zn depends on  
the nature of the initial raw material and on the conditions of  
leaching.

Card 1/1 1. Lead--Production 2. Lead ores--Processing  
3. Chloride solutions--Applications

G.S.

AUTHORS: Matveyeva, K. T. and Novikov, I. I. (Alma-Ata, Moscow).

TITLE: Healing of shrinkage cracks during crystallisation.  
(Zalechivaniye usadochnykh treshchin v period kristallizatsii).

PERIODICAL: "Izvestiya Akademii Nauk, Otdeleniye Tekhnicheskikh Nauk",  
(Bulletin of the Ac.Sc., Technical Sciences Section),  
1957, No.5, pp.70-76 (U.S.S.R.)

ABSTRACT: In the introductory part the conclusions and views of various authors are reviewed. Most of the information published on this problem relates to aluminium. Several authors (12-14) expressed the view that liquid steel is capable of healing hot tears. This point of view has been considered in particular detail by Ryzhikov, A.A. (15). Healed cracks in steel seem to be shown up by sulphide lattices which form as a result of filling up of tears by the melt which is enriched by liquating elements; if the crack is not fully healed, lattice forming sulphides can be detected at the end of the crack and appear as a continuation of it. According to Ryzhikov "whiskers" in steel castings are the result of internal tears into which melt is drawn which is enriched by such liquating elements as carbon, sulphur and phosphorus. Pronov, A.P.(17) arrived at the conclusion that carbon steel does not possess the ability of

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Healing of shrinkage cracks during crystallisation. (Cont.)

24-5-8/25  
healing cracks which form during impeded shrinkage in a metal mould and this is attributed to low fluidity of the steel at the liquidus temperature, a high surface tension and the presence of oxide films. The contradictions in literature can be summarised thus: some authors consider that hot tears can be healed by eutectoidal composition melt or generally by the liquid which is the last to crystallise at a constant temperature and this ability of healing has a decisive influence on the hot tear properties of the alloy; other authors aimed to prove that healing of cracks is a rare process which, in the general case, cannot have any decisive influence on the hot tear properties of an alloy and this view seems to be confirmed by the fact that relatively rarely are healed cracks observed on micro-specimens. Still other authors consider that healing plays an important role only in alloys in which crystallisation proceeds at a constant temperature of the eutectic. All the authors base their conception on the healing of the cracks on indirect observations, e.g. absence of cracks in alloys with high quantities of eutectic, eutectic bands in specimens of light alloys and stretched out liquation in the tail of cracks of steel castings. In this paper the results are

Card 2/5

Healing of shrinkage cracks during crystallisation.(Cont.)  
described of direct microscopic observation of the development  
of crystallisation cracks and their filling up by melt.  
The experiments were carried out mainly on aluminium alloy  
specimens, 100 mm long, 7 mm high and 6 mm wide (Fig.1).  
To concentrate the crack formation onto a single spot, a  
contraction of 2 mm was provided along the width. The  
aluminium alloy was cast into a suitable mould and then  
placed into an electric furnace where it was heated together  
with the mould to 725-750 C. Following that, the mould with  
the alloy was rapidly transferred to a second furnace which  
was heated to 50 to 100 C for the purpose of controlling the  
cooling speed. The second furnace was fitted with an  
observation microscope so that it was possible to observe  
the surface of the crystallising alloy with a magnification  
of forty times. Such observations enable the obtaining of  
direct proof of the possibility of healing of shrinkage  
micro-tears by the melt. In alloys of the eutectic system  
the cracks were healed by melts which usually did not have  
a eutectic composition. Healing of the crack with an  
eutectic proved to be a particular and a very rare case.  
Since the structure of the metal in the healed crack does  
not differ appreciably from the structure of the metals

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Healing of shrinkage cracks during crystallisation. (Cont.)

surrounding it, the healing of the crack can be<sup>24-5-8/25</sup> observed only relatively rarely on metallographic specimens. Healed cracks can be seen only if the melt which fills up the cracks is intensively enriched with liquating elements (for instance in steels) or if the melt had a eutectic composition or if crystallisation of the melt in the crack took place under conditions of intensive cooling. In cast components only a small fraction of the total number of generated fractures is observed, since numerous microcracks heal during crystallisation. Cracks are healed by the melt due to the effect of the hydrostatic pressure and due to capillary forces. An important technological factor is the condition of feeding of the part of the casting in which microcracks form. Narrowing of the transition zone, creation of directional crystallisation, vibration, increase of the hydrostatic pressure and regulation of the gas content permit intensification of the healing and thereby to reduce rejects caused by shrinkage cracks. The authors express their thanks to A. A. Bochvar for his criticism.

There are 3 figures, 19 references, 12 of which are Slavic.

SUBMITTED: June 18, 1956.

ASSOCIATION: Physico-Technical Institute, Ac.Sc. Kazakhstan.

Card 4/5

Healing of shrinkage cracks during crystallisation. (Cont.)  
24-5-8/25

ASSOCIATION (Cont.): (Fiziko-Tekhnicheskiy Institut AN Kazakh SSR).  
Moscow Institute of Non-Ferrous Metals and Gold.  
(Moskovskiy Institut Tsvetnykh Metallov i Zolota).

AVAILABLE:

Card 5/5

MATVEYEVA K. T.

24-10-6/26

AUTHORS: Glagoleva, N. N., Matveyeva, K. T. and Novikov, I. I.  
(Moscow, Alma-Ata).

TITLE: On the causes of differing hot shortness of alloys with an equal effective crystallisation range. (O prichinakh razlichnoy goryachelomkosti splavov s odinakovym effektivnym intervalom kristallizatsii).

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1957, No.10, pp. 41-46 (USSR)

ABSTRACT: In studying the casting properties, including hot shortness, the method of physico-chemical analysis has proved ~~very~~ successful; this method has been used most widely by a number of authors and more recently by a team of the Birmingham University (Refs.9-18). Comparison by means of this method of the diagrams "linear shrinkage-composition" and "hot shortness-composition" with the diagram of state of a two-component system permits detection of the role of the crystallisation range and to establish the fact that hinderances to shrinkage above the solidus are particularly dangerous and lead to the formation of crystallisation cracks. A.A. Bochvar and his team (Refs. 2,3,6) have established that the linear shrinkage begins at a temperature at which a skeleton of

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On the causes of differing hot shortness of alloys with an equal effective crystallisation range.

crystals forms in the casting; in most industrial alloys this temperature is between the liquidus and the solidus temperatures. The part of the crystallisation range between the temperature of formation of the rigid skeleton and the solidus temperature is designated as the "effective" crystallisation interval; the larger this interval the larger will be the linear shrinkage of the alloy during crystallisation and the more pronounced will be its tendency to hot shortness if comparing alloys of a single system. In this paper some results are given relating to the comparative investigation of alloys with practically identical "effective" crystallisation intervals. The experiments were carried out with aluminium alloys containing 6.2% Cu and Al alloys containing 2.7% Si. A tensile test method for aluminium alloys above the solidus temperature is described which has a good reproduceability of the results and it is shown that the strength indices of the alloy in the crystallisation range do not determine its tendency to forming crystallisation cracks. Difference in the hot shortness of alloys with equal effective crystallisation intervals is attributed

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On the causes of differing hot shortness of alloys with an equal effective crystallisation range.

to differences in the absolute values of plasticity and the character of their temperature dependence above the solidus line. The shape of the specimen in the solid-liquid state is shown in Fig.2, p.43; it was subjected to tension in a vertical tubular furnace using clamps as shown in Fig.3, one of which was fixed to the frame and the other was fixed to the bottom head of the specimen. The graph, Fig.4, p.44, shows the temperature dependence of the ultimate strength and the relative elongation near the solidus line for the aluminium alloy with 6.2% Cu as well as for the aluminium alloy with 2.7% Si. The differing hot shortness of comparable alloys is attributed to differences in the relative elongation in the crystallisation temperature range. There are 4 figures and 27 references, 13 of which are Slavic.

SUBMITTED: June 15, 1957.

ASSOCIATION: Moscow Institute of Non-Ferrous Metals and Gold.  
(Moskovskiy Institut Tsvetnykh Metallov i Zolota),

Card 3/3 Institute of Nuclear Physics, Ac.Sc., Kazakh SSR.  
(Institut Yadernoy Fiziki AN Kazakh.SSR)

AVAILABLE: Library of Congress.

*Matveyeva, K.T.*

**AUTHORS:** Novikov, I.I., Matveyeva, K.T.

32-11-39/60

**TITLE:** Measuring the Indices of the Durability and Plasticity of Alloys in the Crystallization Interval (Izmereniye pokazateley prochnosti i plastichnosti spлавov v intervale kristallizatsii)

**PERIODICAL:** Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 11, pp. 1369-1372 (USSR)

**ABSTRACT:** In the introduction a number of Soviet and foreign papers are mentioned, and the authors arrive at the conclusion that the problem of the explanation of the dependence of the durability limit (of alloys) on temperature is sufficiently explained, but with respect to plasticity (plastic properties) this problem has remained more or less unexplained. This is due to the fact that a sample becomes very brittle at a temperature above "solidus" point and that its durability is lost. In connection with the investigation of melting cracks which form in the course of casting, the measurements of durability and plasticity indices with respect to aluminum alloys are dealt with. A cylindrical sample was used for testing, which, with a total length of 76 mm, had a diameter of 5 mm at about 34 mm of its length, i.e. about in the middle. In the direction of the two ends this diameter was increased to about 9 mm and at the ends pins of about 12 mm diameter and 6 mm

Card 1/2

32-11-39/60

**Measuring the Indices of the Durability and Plasticity of Alloys in the Crystallization Interval**

length were formed. These pins were provided with a special device for holding the sample. The sample together with the holding device was heated in a furnace. This furnace was arranged in such a manner that it could be pushed in a suspended state over the also suspended sample, and vice versa. While the sample was suspended on a holder, a vessel was suspended on a second holder which contained scrap or a similar material as a weight. The temperature was measured by means of a thermo-couple. After the sample began to expand after the shot was put into the vessel and then was torn, the following moments were fixed: The temperature at the beginning of expansion and of tearing, and also other data such as the weight of the scrap and of the vessel were noted down. In this way the limits of the durability of the alloys were determined and, at the same time, the plastic properties were ascertained according to the data obtained concerning the moment of expansion and the thinning of the sample at a certain point. There are 3 figures and 19 references, 7 of which are Slavic.

**ASSOCIATION:** ~~Physical~~ Institute for Nonferrous Metals and Gold, and Technical Institute of the ~~AS KazSSR~~ Moskovskiy institut tsvetnykh metallov i solota i Fiziko tekhnicheskii institut Akademii nauk KazSSR)  
Library of Congress

**AVAILABLE:**  
Card 2/2

AUTHORS:

*Matveyeva K.T.*  
Presnyakov, A.A., Matveyeva, K.T.,  
Mironenko, Yu.P.

32-12-52/71

TITLE:

On the Measuring of Temperature in Thermal Mechanical Investigations of Metals (Ob izmerenii temperatur pri goryachikh mekhanicheskikh ispytaniyakh metallov).

PERIODICAL:

Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 12, pp. 1515-1515 (USSR)

ABSTRACT:

In the introduction it is said that the results of measurements carried out with thermocouples often do not agree, which can mostly be explained by the fact that the sample and the thermocouple in the respective case do not possess the same optical properties. For reasons of the precise definition of a number of experimental data concerning aluminum- and zinc alloys, a uniform investigation of these materials was carried out. For this purpose a differential-nichrome constantan thermocouple, made of a wire of 0.30 mm thickness, and a round nichrome electric furnace was used. Between the sample and the heater a nickel screen was fitted in order to attain uniform heating of the sample. Both soldering seams of the thermocouple were fastened in the middle part of the sample by means of copper wire at opposing points. As a measuring device a "M-21"

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On the Measuring of Temperature in Thermal Mechanical  
Investigations of Metals

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galvanometer was used. Experiments show that in the case of a heating lasting up to 20 minutes no definite equalization of temperature between the sample and the thermocouple could be attained, so that in aluminum alloys differences of 6-8% were observed in results. A checking of data concerning zinc alloys showed still higher results. In the case of the soldered parts being badly fastened to the sample, the error is greater.

ASSOCIATION: Physical-Technical Institute AN Kazakh SSR (Fiziko-tekhnicheskii institut Akademii nauk Kazakh SSR).

AVAILABLE: Library of Congress

Card 2/2 1. Heat treatment-Temperature measurement

MATVEYEVA, K. T.

with I. I. Novikov "Closing Up Shrinkage Fissures During Crystallization"

Transactions of the Inst. of Nuclear Physics, Kazakh SSR, Acad. Sci. Trudy, v. i.,  
Alma-Ata, Izd-vo AN Kaz SSR, 1958,

This vol. contains results of research at the Inst. of Nuclear Physics for the  
years 1954-56.

MATVEYEVA, K.T.; NOVIKOV, I.I.

Closing up of shrinkage cracks during the crystallization period.  
Trudy Inst. iad. fiz. AN Kazakh. SSR 1:265-273 '58. (MIRA 12:2)  
(Aluminum alloys--Testing)

MATVEYEVA, L.

~~Workers~~ should know chemistry. Prof.-tekh.obr. 22 no.5:25 My '65.  
(MIRA 18:5)

1. Nachal'nik otдела tekhnicheskogo obucheniya kombinata  
"Trekhgornaya manufaktura".

MATVEYEVA, L.A.; NIKITIN, N.M.

Trip of a Soviet trade-union delegation to the Korean People's Democratic Republic. Razved.i okh.nedr 28 no.1:50-51 Ja '62.  
(MIRA 15:3)

1. Moskovskiy territorial'nyy komitet profsoyuza rabochikh geologorazvedochnykh rabot (for Matveyeva).
2. Tul'skaya kompleksnaya geologorazvedochnaya ekspeditsiya (for Nikitin).  
(Korea, North--Mineral industries)  
(Korea, North--Visitors, Russian)

MATYAYEVA, L.K.; PREOBRAZHENSKAYA, A.M.

Results of the verification of new formulas for calculating  
speeds and forces of cutting using electronic computers.

Trudy Proek. tekhn. i nauch.-issl. inst. no.2:153-164 '63

(MIRA 17:7)

MATVIEVA, Lyudmila Matislavovna; D'YACHENKO, I., red.; GORKAVENKO, L.,  
tekhn.red.

[Analysis of the economic aspects of operations in metallurgical enterprises] Analiz khosiaistvennoi deiatel'nosti metallurgicheskikh predpriatii. Kiev, Gos.isd-vo tekhn.lit-ry, 1959.  
116 p. (MIRA 13:3)

(Metallurgical plants--Accounting)

FEDOROV, S.G.; KUSKOV, V.K. [deceased]; MATVEYEVA, L.M.

Azo coupling of novolak resins. Vest. Mosk. un. Ser. 2 Khim.  
19 no.6:34-36 N.D. '64. (MIRA 18:3)

1. Kafedra khimicheskoy tekhnologii Moskovskogo universiteta.



MATVEYEVA, L.S.

Conference on the toponymy of the East. Vop. geog. no.58:179-181  
'62. (MIRA 15:9)  
(Near East—Names, Geographical—Congresses)

ZLOCHEVSKIY, P.M. (Moskva); LEVENSON, V.I. (Moskva); MATVEYEVA, L.S.  
(Moskva)

Case of primary cancer of the adrenal cortex. Probl.endok. i gorm. 2  
no.5:120-125 S-0 '56. (MIRA 9:12)

1. Iz gosspital'noy terapevticheskoy kliniki Lechebnogo fakul'teta  
(zav. - deystvitel'nyy chlen AMN SSSR prof. A.L.Myasnikov) i kafedry  
patologicheskoy anatomii (zav. - chlen-korrespondent AMN SSSR prof.  
A.I.Strukov) I Moskovskogo ordena Lenina meditsinskogo instituta.  
(ADRENAL CORTEX, neoplasms,  
primary carcinoma (Rus))

MATVEYEVA, L. S., Cand Med Sci -- (diss) "Roentgenokymographic Investigation of the Aorta in Hypertensive <sup>on</sup> ~~Disease~~ and Atherosclerosis." Mos, 1957. 14 pp (1st Mos Order of Lenin Medical Inst im I. M. Sechenov), 200 copies (KL, 47-57, 90)

66

SHIYAN, I.V.; LUZKOVA, S.L.; MATVEYEVA, L.S.; ZILOVA, A.N.

Osseous form of xanthomatosis in adults. Klin. med. 38 no. 4:141-  
145 Ap '60. (MIRA 14:1)

(LIPOIDOSIS)